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ABSTRACT

**"METHOD FOR THE GENETIC MODULATION OF THE BIOSYNTHESIS OF  
HEMICELLULOSES, CELLULOSE AND URONIC ACIDS IN PLANT CELLS  
USING GENE EXPRESSION CASSETTES"**

5           The present invention refers to gene expression cassettes  
encoding enzymes involved in the metabolic pathway for the biosynthesis of  
hemicelluloses, cellulose and/or uronic acids, and to a method for genetic  
transformation of plant cells through the introduction of one or more gene  
expression cassettes from the present invention, and the overexpression and  
10   repression of these genes in plants.

More particularly, the present invention refers to a method for  
introducing expression cassettes in plants. Additionally, the present invention  
refers to genetically modified plants.

15           The present invention also refers to the attainment of the  
genetically modified plant, its derived plants and seeds, as well as the wood,  
paper and cellulose from this plant.